UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,788	08/01/2001	Gordon James Yorke	OR02-13501	5192

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EXAMINER
BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/920,788	YORKE ET AL.
	Examiner	Art Unit	
	Lewis A. Bullock, Jr.	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,6,12,13,15,16 and 32* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,6,12,13,15,16 and 32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3, 5, 6, 12, 13, 15, 16 and 32 are rejected under 35 U.S.C. 103(a) as

being unpatentable over ROTHROCK in view of BAUER (U.S. Patent 5,870,759).

As to claim 1, ROTHROCK teaches a method for synchronizing object caches,

(deferred synchronizing) (col. 4, lines 59-65), the method comprising the steps of:

changing objects in the a plurality of systems (via participants / arbitrator adding,

modifying, or deleting an object); determining an object change set (blocked change

information containing index of the changed object); sending the object change set

(blocked change information containing index of the changed object) directly among the

a first system (requesting participant / arbitrator) to the second system (another

participant / arbitrator) to cause the second system to use a merging unit (object

manager) to apply the object change set (synchronize the object change (col. 9, line 60

– col. 12, line 46) (via deferred synchronization wherein the client / human interface /

agent can continue to perform local changes regardless if the previous changes have

been synchronized yet) (col. 10, lines 45-64 in particular lines 58-64; col. 11, line 50 –

col. 12, line 13; col. 1, lines 37-53; col. 4, line 65 – col. 5, line 5; col. 6, line 60 – col. 7,

line 25). It is inherent to the teachings of ROTHROCK that since each participant and

arbitrator which is a participant is capable of locally performing a change and relay that

change to at least one system that each system/participant is capable of changing an

object, determining an object change set (change information to be propagated to a

system), and sending the change set to another system. However, ROTHROCK does

not explicitly mention that the change set only contains changed attributes wherein an

object has unchanged attributes.

BAUER teaches the concept of synchronizing databases among clients wherein

the databases have at least one unchanged attribute (rows / columns / data fields) and

the change message (change message / refresh message) propagated among the

databases only contains attributes (rows / columns / data fields) that have changed (via

for an update, the client must send new values of all updated non-key columns and

does not send values for columns that have not been modified) (col. 3, lines 3-13; col. 4,

lines 15-27; col. 9, line 60 – col. 10, line 11; col. 13, line 64 – col. 14, line 18).

Therefore, ti would be obvious to one of ordinary skill in the art to combine the teachings

of ROTHROCK with the teachings of BAUER in order to reduce synchronization costs

(col. 3, lines 3-13).

As to claim 2, ROTHROCK teaches a communication link between the first

system and the second system (communication medium between participants) (col. 6,

lines 14-30; col. 4, lines 42-48) and that object managers of the participants keeps track

of participants such as when a participant joins the meeting that after the joining their

objects are synchronized (col. 7, lines 47-54). It is inherent within the teachings of

ROTHROCK that when a participant joins a meeting a communication link is established between the joining participant and the meeting participant such that changing of an object in the meeting is propagated to the other participants including the joining participant.

As to claim 3, ROTHROCK teaches communications medium is any type of communications medium using any one of the various networking standards (col. 6, lines 14-25). Official Notice is taken in that publish/subscribe protocol is a well-known communication standard and therefore would be obvious in view of ROTHROCK and BAUER in order to communicate change information.

As to claim 5, ROTHROCK teaches sending the object change information to a database (arbitrator's copy of objects) for updating the object in the database with the object change set (via sending the change regarding the object to another participant for synchronization with that copy of the object) (col. 9, line 60 – col. 12, line 46).

As to claim 6, ROTHROCK teaches the synchronization of objects within agents (col. 6, line 60 – col. 7, line 7). However, ROTHROCK does not teach receiving an error message from the database when the updating fails.

BAUER teaches receiving an error message from the database if the updating of the corresponding database fails; and discarding the change set prior to the sending step in response to the error message (wherein the checksum is compared with a

stored checksum transmitted from the server after the last refresh and if the refresh is

not valid a corrupt state has been detected and an error message is set to the server)

(col. 10, lines 25-35).

As to claims 12, 13, and 15 and 16, refer to claims 1, 2, and 5 and 6 for rejection.

As to claims 32, reference is made to a computer readable storage medium that

corresponds to the method of claim 1 and is therefore met by the rejection of claim 1

above.

Response to Arguments

3.   Applicant's arguments with respect to claims 1-3, 5, 6, 12, 13, 15, 16 and 32

have been considered but are moot in view of the new ground(s) of rejection.

The examiner would like to make Applicant aware that Rothrock does teach a

system directly synchronizing with a second system which merges the change

information into the second system (via among participants and the participant that

functions as an arbitrator). What Rothrock does not teach is that the first system

directly communicates the change set with both the second and third system, the

second system directly communicates the change set with the first and third systems,

and the third system directly communicates the change set with the first and second

systems. Rothrock teaches each system directly communicating a change set to one

system, but not directly to multiple systems. The claims only allude to one system which Rothrock teaches.

Relevant Prior Art of Record

Applicant is also requested to see U.S. Patent 6,490,596, herein MICKA as teaching the sending of data updates by selectively omitting unchanged data parts in that only sending changed data of a data object update without the unchanged sub-parts as being well known in the art.

Conclusion

4.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
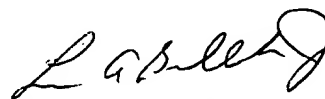
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 21, 2006

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER